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## Capillaria buccalis n. sp. (Nematoda) from Bufo vulgaris japonicus

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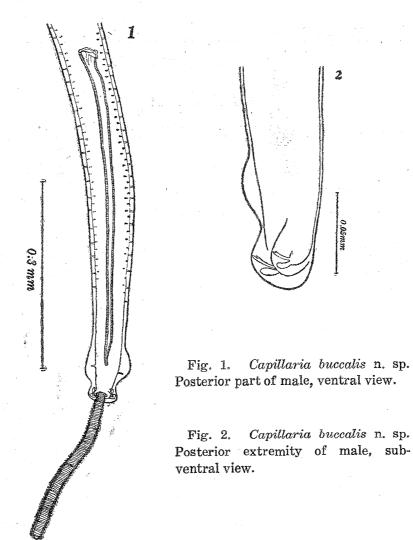
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This worm was found attached to, or penetrating, the mucosa of the tongue, especially on its underside, the palate, and the pharynx of *Bufo vulgaris japonicus* Schlegel from Kyoto. Some of them were entirely imbedded in the submucosa of the said location.

Body very slender,  $6.8-8.8 \times 0.08-0.09$  mm. Cuticle smooth, though faint transverse striations are recognizable under the surface. At the posterior extremity just in front of the cloacal aperture there are paired subventral alae 45-70 µ long and supported each by an inconspicuous papilla. Bacillary band originating immediately behind nerve ring and terminating at posterior extremity. Nerve ring 65–100  $\mu$  from anterior extremity. Esophagus 2.7-3.9 mm long, para-esophageal cells 36-42 in number, with very large nuclei. Intestinal portion 4.1-4.9 mm long. Ratio of two body regions 1:1.25-1.5. Testis arising at a point 0.85-0.95 mm from posterior extremity with the end directed backwards or forwards, turning back on itself at posterior end of esophagus. Spicule 0.57-0.61 mm long,  $18-27 \mu$  in diameter at its enlarged anterior end, gradually tapering posteriorly to a blunt point. Spicular sheath unarmed, with fine transverse wrinkles. Genital bursa short, about 15  $\mu$  long, with slight midventral incision, supported on each side by two dissimilar, ventrally directed rays with common base; anterior ray slender, digitiform,  $15 \mu$  long, with bifid tip, posterior ray a little thicker and shorter, gently curved forwards, almost parallel to the anterior. Cloacal aperture ventroterminal.

Female. Body  $8.1-12\times0.11-0.15$  mm. Bacillary band up to  $90~\mu$  wide, extending between nerve ring and posterior extremity. Nerve ring  $75-100~\mu$  from head end. Esophagus 2.9-4.1 mm long, para-esophageal

cells 28–38 in number. Intestinal portion 4.9–8.0 mm long. Ratio of anterior to posterior portion 1:1.5–2.2. Anus terminal. Ovary arising at posterior extremity, germiduct turning backward at a point 2.8–4.3 mm from posterior extremity, turning forward to lead into elongate receptaculum seminis at a point 0.9–2.5 mm from posterior extremity. Uterus continued imperceptibly into muscular, unarmed vagina. Vulva



usually depressed, at level of posterior end of esophagus (2.9–4.1 mm from head end). Eggs lemon-shaped, 66– $78\,\mu$  in length including polar plugs, 24–36  $\mu$  in breadth, not sculptured.

This species differs from the most closely allied *Capillaria bufonis* Morishita, 1926, from the same host species, chiefly in the structure of the posterior extremity of the male. In *C. bufonis* the para-esophageal cells are over 50 in number, and the digitiform lateral bursal ray, arising

from the ventral corner of the tail end just outside of the minute conical protuberance is directed posterodorsally and then curves inwards. The prebursal alae as observed in the present species are entirely lacking in Morishita's species. The location of the parasite, to which the specific name refers, is also worth noting.

## LITERATURE

Morishita, K. 1926 Studies on some nematode parasites of frogs and toads in Japan. Jour. Fac. Sci. Imp. Univ. Tokyo, Sect. 4, 1, 1.

Yamaguti, S. 1941 Studies on the helminth fauna of Japan. Part 34. Amphibian nematodes, II. Jap. Jour. Zool. 9(3), 400.